



ShipLAB, CSDL, and the VizLab: The Nautical Archaeology Digital Library (nadi.tamu.edu)

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J. Richard Steffy Ship Reconstruction Laboratory

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ShipLAB Mission

The ShipLab was created by J. Richard Steffy in 1976 and today is one of the laboratories of the Centre for Maritime Archaeology and Conservation of the Anthropology Department at Texas A&M University. Our mission is to acquire and disseminate knowledge about shipbuilding through time. As a **classroom** our main objective is to provide an effective learning environment. As a **research laboratory** our objective is to facilitate investigation, seek public and private research funds, and recruit and retain quality students for our projects. As an **outreach institution** we aim at providing information, education, and guidance on the discipline of nautical archaeology and the importance of the world's submerged cultural heritage, perhaps more than ever threatened by treasure hunting.

The work of the ShipLAB is integrated with the **Center for the Study of Digital Libraries (CSDL)** and **Dr. Richard Furuta**, and the **Department of Visualization** and **Dr. Ergun Akleman**.



Center for the Study of Digital Libraries
Texas A&M University

The CSDL was established in 1995 by The Texas A&M University System Board of Regents and builds upon research developed in the Hypermedia Research Laboratory established in 1987. A member of the global digital library research community, the Center provides a focal point for digital libraries research and technology for the State of Texas. Its mission is to foster pioneering research on the theory and application of digital libraries and to create flexible and efficient new technologies for their use.



The Texas A&M University Visualization Laboratory was established in 1988. The academic program started one year later. The Visualization Laboratory and Visualization academic program were created in response to clear indications that digital visualization was going to play a highly important role in digital communication. The visualization academic programs produce leaders in the fields where art and science merge.

The Nautical Archaeology Digital Library



Started in 2005 with a NSF grant (IIS-0534314), the main objective of this project was to design, implement, and evaluate a framework that will a) efficiently catalog, store, and manage artifacts and ship remains along its associated data and information produced by an underwater archeological excavation, b) integrate heterogeneous data sources from different media to facilitate research work, c) incorporate historic sources to help in the study of current artifacts, d) develop visualization tools to help researchers manipulate, observe, study, and analyze artifacts and their relationships; and e) develop algorithm and visualization based mechanisms for ship reconstruction, i.e., to determine where recovered pieces and fragments fit in a whole.

The project focused on a specific excavation site, the Pepper Wreck, believed to be the remains of the nau *Nossa Senhora dos Mártires* (1606), and aimed at placing it within the context of the broader, extensive collection available at Texas A&M University, which resulted from over four decades of work in more than 30 countries.

In the first phase of this project resulted in a PhD

dissertation (Carlos Monroy), the development of a website and the publication of posters and papers.



Esposende and the mouth of the Cávado River.

In 2018 we received a T3 Texas A&M Grant (P.I. Dr. Richard Furuta) to develop a study of a maritime landscape through time - Esposende, Portugal - and we decided to use the framework developed in 2005-2009, this time focusing on the development of a maritime community and the way a population interacted with the sea over the centuries.

Shipwrecks are tangible reflections of the culture and technology of their time. They are closely related to the narratives, myths, power structures, and bureaucracies of their time. Spatially, their location

reflects their routes, which in turn provide insight to economic and political alliances and disputes. Technologically, the materials and the methods used provide a window on the existing cultures and its relationships .

This project is a collaborative effort of researchers in Texas A&M University's Center for the Study of Digital Libraries (CSDL), the J. Richard Steffy Ship Reconstruction Laboratory (ShipLAB), and the Department of Visualization (VizLab). It draws its materials from the extensive collection of data accumulated at the ShipLAB over the last 20 years.

Research and education are entering a new paradigm in this century, in which the traditional rift between science, technology, engineering, and mathematics, and the disciplines encompassed under the broad 'humanities' designation is being increasingly breached.

The growing consensus is that an understanding of the most important problems humanity will face this century – trade, migrations, population growth, climate change, resources management, or regional conflicts – will be based on inputs from both the hard sciences and the humanities. On one side, humanities studies, and particularly archaeology, increasingly support their research with hard data and quantitative methods; on another side it seems that also on the hard sciences side it is becoming consensual that technological development depends on a broader understanding of human nature and is increasingly based on behavior studies and attempts to understand the human mind.

Geography, history, and archaeology are particularly important because both our perception of the present world, and our best projections for the future are based on so-called hard and soft sciences, from climate models to the study of the past as a source of explanations for the present conflicts, struggles, ideologies, and ethnic aspirations, to cite only a few examples.

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The NADL website is intended as a platform for the divulgation of scholarly work in maritime archaeology, developed in, or with the collaboration of the ShipLAB.



Oskar Kokoschka Stockholm Harbour, 1920.

It aims at a wide public and was conceived as a platform to share our work and include the participation of non-professionals, such as model makers and other interested audiences. We will try to share our primary data online in as simple as possible ways. Our work is to try to reconstruct past human activity and the environments where people like us lived, thrived, and struggled, hoping to enrich our experience and understand ourselves better.

The social value of archaeology lies on its contribution to the public understanding of the world. As most kids around the world are in school today –

something that never happened before, in the history of the planet – we expect to see the rise of diverse interpretations of archaeological data in a near future, and the development of more diverse narratives about our common past.

The internet has been an exceptional tool for the democratization of knowledge and it is great to see that as the older archaeologists retire, a new group of young archaeologists is emerging with a new paradigm, less secretive, less complicated, less competitive, and more engaged politically. Teams are becoming increasingly more diverse, and archaeology is moving away from the ivory tower paradigm – or dungeon, as a colleague of mine likes to say – and being replaced by a much more serious and creative multidisciplinary discipline that is both more intelligent, and much more fun. This is even true for the cultural resource management world. Organizations like the Maritime Archaeology Trust (UK) are working hard to share their discoveries online in ever more creative ways, and companies like ASI (Canada) are making all their reports available online.

As we work on our shipbuilding databases, however, it becomes increasingly evident that we must standardize the description of wooden hull structures, in the same way biologists standardized the description of insects.

Many wooden remains of ancient ships are only partially published and some are not published at all. Some archaeologists are notoriously slow in publishing their results, others are implausibly secretive, and most don't share their primary data. And this makes it very difficult to implement comparative studies.

J. Richard Steffy argued already in the 1990s that computers were opening a wide range of avenues of research in the study of wooden shipbuilding. Twenty-five years later, we are renewing his plea for nautical archaeologists to adopt our proposed methodology – Castro, F., Bendig, C., Bérubé, M., Borrero, R., Budsberg, N., Dostal, C., Monteiro, A., Smith, C., Torres, R., and Yamafune, K., 2018. "Recording, Publishing, and Reconstructing Wooden Shipwrecks" *Journal of Maritime Archaeology*, 13.1: 55-66 – or to propose better ones.

The NADL website (nadl.tamu.edu) is organized in five main tabs. The "Home" tab contains an introductory text on the importance of the cultural heritage and the urgent resolution of the problems posed by treasure hunters - or legal looters, as they are better known - identifies the team, the institutions with whom we have cooperated or are presently cooperating, and includes a list of the thesis and dissertations relevant for our work.

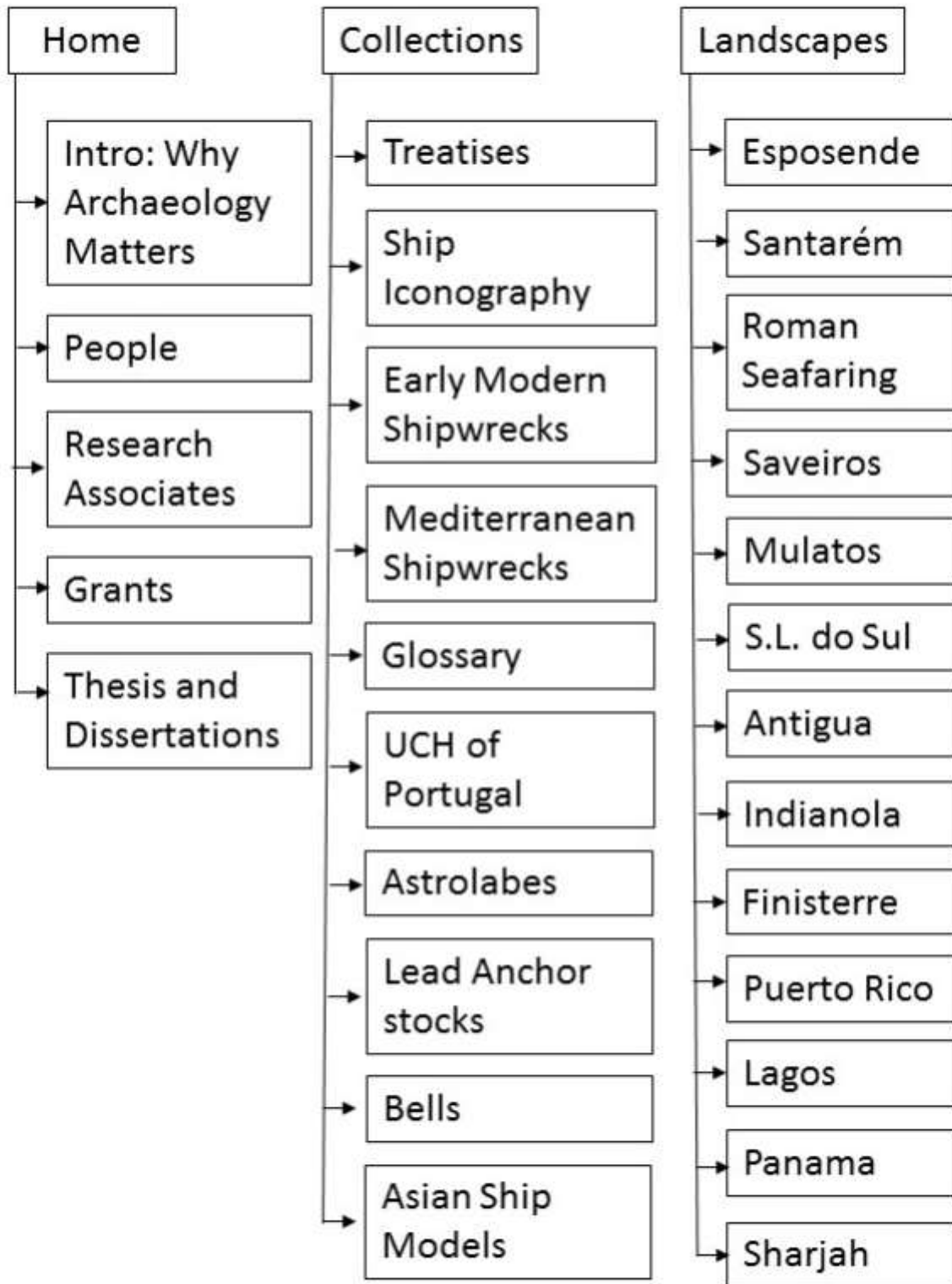
The other four tabs include four different groups of projects: collections, landscapes, shipbuilding and shipwrecks.



There are many reasons why primary data and excavation reports are not accessible to the general public, but the most important are obvious and easy to address.

It is a participated website where we encourage students to participate and change the formats and the appearance of the individual pages. We are well aware of the fact that this website will never be completed and, perhaps more important, it is expected to evolve, as archaeological interpretations are iterative processes.

NADL Organization (Dec. 2019)



We are trying to keep the NADL website simple and thus we have reduced the number of layers, although some of the tabs indicated above are subdivided. Some of these tabs have links to Youtube videos, or to PDFs, some of which are only online at academia.edu.



Most of the tabs are under construction and they are generally update weekly, on Friday. We are still (Dec. 2019) working on GIS applications that we believe will help share the data in an easier way.



research

Main Research Interests



Computers and the dissemination of knowledge - Archaeologists publish a small percentage (around 25%) of the sites they dig and thus destroy forever. At the ShipLAB we believe that the development of computer science, computer graphics, and the internet, have created an environment which can help promote a paradigm change, allowing archaeologists to survey and record faster and cheaper, and to share their primary data in real time.



Ship Modeling and Computer Graphics - A cooperation between the Department of Visualization, Texas A&M University, and Centre for Marine Technology and Engineering, Instituto Superior Técnico, Lisbon, Portugal.



Submerged Cultural Heritage - A substantial portion of the world's submerged cultural heritage was destroyed in the last 50 years by treasure hunters. This problem has been a major interest and research subject in the ShipLAB.



Iberian Seafaring - The maritime expansion of the late 15th and early 16th centuries had a major impact on European history, although the ships that made it possible are largely unknown to us. The ShipLAB has devoted a considerable time and effort to the study of the people that conceived, built and sailed the ships that first mapped the world, in the end of the Middle Age.

Projects

Over the last two decades we have developed or participated in several projects and the NADL is intended as a place to share them.

Grants:



Rutter (2019-present), dir. Henrique Leitão. European Research Council grant. Early modern nautical rutters (sailing directions) are the earliest Western documents that testify to the stable and regular lived experience of traversing the earth's oceans on a global, planetary scale.



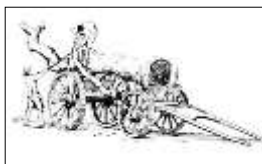
Um Mergulho na História (2019-present), dir. Alexandre Monteiro. Projecto OPP No. 466. Survey and study of the Sado River maritime landscape.



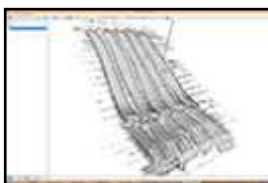
Dead Ships and Live Communities (2019-present), dir. Richard Furuta. Texas A&M T3 Grant. Study of Esposende maritime landscape framed in the NADL Project: sharing archaeological data in a creative way.



iMARECULTURE (2018-present), dir. Dimitrius Skarlatus. European Union's Horizon 2020 research and innovation programme under grant agreement No 727153. Project's i-MareCulture scope is to raise public awareness of European identity by focusing in maritime cultural heritage, which by default bridges different civilizations. In particular, i-MareCulture aims in bringing inherently unreachable underwater cultural heritage within digital reach of the wide public by implementing virtual visits, serious games with immersive technologies and underwater augmented reality.



ForSEAdiscovery (2013-present), dir. Ana Crespo Solana and Nigel Nayling, consists of the development of a dendrochronology database for the Iberian Peninsula. Marie Curie Multi-ITN project entitled "Forest resources and Ships for Iberian Empires: ecology and globalization in the Age of Discovery." The ShipLAB is a partner to this project.



GroPlan (2013-present), dir. Pierre Drap, is a grant from the French Agence Nationale de la Recherche titled "Ontology and Photogrammetry ; Generalizing Surveys in Underwater and Nautical Archaeology." The ShipLAB is a partner to this project.



An Informatics Framework to Support Scholarly Field Studies:

The Nautical Archaeology Digital Library (NADL) (2005-present), dir. Richard Furuta and Filipe Castro, proposes to design, implement, and evaluate a comprehensive package of tools in support of nautical archaeological research.

Collections:



Iberian Ship Treatises Compilation (2014-present), dir. Filipe Castro, Patricia Schwindinger and Paulo Monteiro, is a study and inventory of Iberian shipwrecks known to exist.



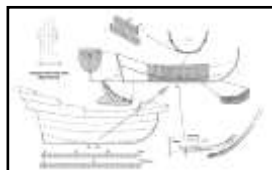
The Ship Iconography Database (2007-present) dir. Richard Furuta and Filipe Castro. This project is a compilation of quality images of ships from the medieval and early modern periods.



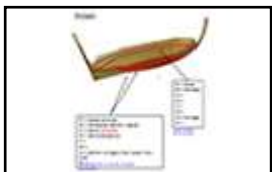
Early Modern Shipwrecks database (2016-present), dir. Filipe Castro and Cecilia Smith, is a study and inventory of European early modern shipwrecks worldwide.



Iberian Shipwreck Scantlings (2001-present) is a study and inventory of the shape and size of the timber components of early modern Iberian ships.



Early Modern Ships' Architectural Signatures (2001-present), dir. Filipe Castro, is a study and inventory of the construction features that are unique to certain ship-building traditions.



Iberian Shipbuilding Glossary (2014-present) is a study and inventory of Iberian shipwrecks known to exist.



Mediterranean Shipwrecks Database (2018-present), dir. Carlos de Juan and Filipe Castro, and Paulo Monteiro, is a study and inventory of Mediterranean ships with hull remains dating to the Bronze Age through the Middle Ages.



Portuguese Underwater Archaeological Sites Database Shipwrecks Database (2018-present), dir. Filipe Castro and Miguel Martins, is an inventory of possible underwater archaeological sites, based on the national database (Endovérico) and twenty years of inquiries near the fishermen, divers, and other stakeholders.



Marine Astrolabes Database (2005-present) is a study and inventory of all nautical astrolabes known to exist.



Lead Anchor Stocks in Portugal (2018-present), dir. Paul Cochran, Maria Santos and Filipe Castro, is an inventory of all known lead anchor stocks found on the Portuguese coast.



Early Ship Bells Database (2015-present), dir. Sam Cuellar and Filipe Castro, is an inventory of all known ship bells dating to the 16th and 17th centuries.



Asian Boat Models, (2015-present), dir. Filipe Castro and Kotaro Yamafune, in cooperation with Dr. Hans van Tilburg (NOAA) and Dr. Qu Jinliang (Institute of Maritime Cultures, Ocean University of China), this project aims at sharing two rare Asian boat model collections with the public via the internet.

Landscapes:



Esposende Maritime Landscape (2015-present), dir. Filipe Castro, Ivone Magalhães and Anna Linderholm, is a study of the Esposende region and its relation to the sea through time.



Santarém Fluvial Landscape (2019-present), dir. Filipe Castro and Miguel Soares Lopes. This is a study of the relations between Santarém and the Tagus River and the Sea through time.



Roman Seafaring on the Portuguese Coast (2019-present), dir. Filipe Castro. This is an inventory of Roman period underwater sites on Portuguese waters.



The Ships From Mulatos, Colombia (2018-present), dir. Elisabeth Parra and Rene Supien. This is a study of a small community of shipbuilders in Colombia.



Saveiros da Bahia Project, (2011-present) dir. Filipe Castro and Denise Gomes Dias, studies the construction of boats following whole molding methods in S. Salvador da Bahia area, Brazil.



S. Lourenço do Sul, Brazil (2013-2016) dir. Samila Ferreira, completed PhD research. See academic work.



Indianola Maritime Landscape, Texas (2015-present) dir. Sam Cuellar, ongoing PhD research. See academic work.



Antigua Maritime Landscape (2018-present) dir. Arik Board, ongoing PhD research. See academic work.



Finisterre Project (2010-present), dir. Miguel San Claudio, is a study and inventory of shipwrecks along in Galician waters.



The Nautical Archaeology of Puerto Rico (2007-present), dir. Filipe Castro, Richard Fontáñez, and Gustavo Garcia., was a survey and an assessment of the condition of the submerged cultural heritage of Puerto Rico.



The Lagos Project, Portugal (2006-2007), was a field school in the Lagos area, consisting of a survey of the underwater cultural heritage in the region.



The Isthmus of Panama (2008-2014), dir. Bryanna DuBard, was a study of the Spanish golden age defense strategy of that important maritime landscape.. Completed MA research, see academic work.



The Sharjah Survey (2018) was an assessment of the possibility of finding shipwrecks in the vicinity of the 17th century Portuguese fortresses in the Sharjah Emirate.

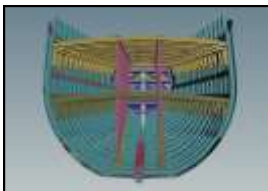
Shipbuilding:



Modeling Manoel Fernandez Ships (2016-present), dir. Filipe Castro, is a study of Manoel Fernandez (1616) shipbuilding treatise.



A Virtual Visit to the Pepper Wreck (2017), dir. Josh Hooton, Jacob Stafford, Cody Leuschner, and Thomas Sell, under the orientation of Dr. Bruce Gooch. This project consisted of a development of a virtual visit to a 3D model of the Pepper Wreck (<https://texag64.itch.io/nossa-senhora-dos-martires-wreck>).



Procedural Model (2016), dir. Matt Suarez, This project stemmed from Andre Thomas' idea of applying a procedural methodology to the modeling of a generic shipwreck using off the shelf Houdini (SideFX) software, and introducing the parameters of the Belinho 1 shipwreck to obtain an ongoing reconstruction. It was object of a MS thesis. See academic work.



Sailing the Pepper Wreck (2006-2010), dir. Filipe Castro and Nuno Fonseca, was a continuation of the Pepper Wreck Project, testing the plausibility of our reconstruction of the India nau *Nossa Senhora dos Mártires*, lost in 1606.

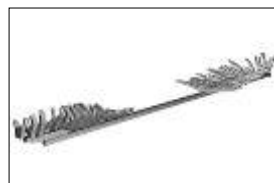


Modeling the Pepper Wreck (2012-2015), dir. Kotaro Yamafune and Filipe Castro. This is a continuation of previous research.

Shipwrecks:



Stella 1 Shipwreck, (2010-present) dir. Massimo Capulli and Filipe Castro, started in 2011, is part of a wider study of the life along the Stella River, Italy, over a period of two millennia.



The Cais do Sodré Project, Portugal (2010-present) started in 2010, this project is the continuation of the unfinished research on this site, interrupted by the untimely death of its former director, Paulo Jorge Rodrigues.



The Highbourne Cay Project (2017-present), dir. Nick Budsberg is the excavation reconstruction and publication of the Highbourne Shipwreck (c. 1520), in the Bahamas.



Playa Damas Shipwreck, Panama (2003-2005), was a survey of an early 16th century Spanish shipwreck site, unfortunately destroyed by treasure hunters before an excavation could be carried on.



The Oranjemund Project (2017-present), is the study of the ship remains of a Portuguese nau lost in today's Namibian coast and believed to be the remains of *Bom Jesus*, lost in 1533.



Belinho Shipwreck (2015-present), dir. Ana Almeida and Filipe Castro, is the excavation and reconstruction of the Belinho shipwreck, possibly a Spanish ship dating to the second quarter of the 16th century.



Baleal 1 Shipwreck (2001-present), is the study of the shipwreck found in Baleal in the late 1980s, and believed to date to the 16th century.



The Arade 1 Project, Portugal (2002-2003), was the excavation of a late 16th century vessel found in the 1970s on the mouth of the Arade River.



Gnalić Project (2011-2014), dir. Irena Radic Rossi and Filipe Castro, started in 2011, the excavation of a large Venetian merchantmen lost off the Croatian coast in 1583 with a cargo bound for Constantinople.



Ribadeo (2017-present), dir. Miguel San Claudio, is the excavation of a Spanish warship built in Napoli and lost at Ribadeo in 1597.



The Pepper Wreck Project (1998-present), was the excavation and reconstruction of the India nau *Nossa Senhora dos Mártires*, lost in 1606.



Tejo A Shipwreck, Portugal (2017-present), is an early 17th century shipwreck found by sport divers Pedro Patacas and Sandro Pinto, and believed to be the remains of the Portuguese India nau *S. Francisco Xavier*, lost at the mouth of the Tagus River in 1625.



Battle of Itaparica, Brazil (2012-2014), dir. Rodrigo Torres, a project supported by the Dutch Cultural Agency, which aimed at the reconstruction of the 1643 naval battle fought between a Portuguese and a Dutch fleet in the waters of São Salvador da Bahia, and the recording of the remains of the ship *Utrecht*.



The Rincón Shipwreck, Puerto Rico (2008-2010), was the study of a shipwreck believed to be the remains of *Defiance*, a Portuguese ship captured by Prince Rupert at Cabo Verde and lost in 1652 in Puerto Rico.



The Oeiras Guns, Portugal (2002), was an emergency rescue and relocation of a cluster of iron guns, probably dated to the 18th century.



The H.M.S. Solebay Project, Nevis and St. Kitts (2002), dir. Chris Cartellone, was a survey and recording of the remains of an British ship lost at Nevis in 1782.



The Tejo B Shipwreck, Portugal (2017-present), is a 19th century shipwreck at the mouth of the Tagus River, found by sport divers Pedro Patacas and Sandro Pinto.



Diogo Botelho

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João Figueira de Cairros

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Teaching

NAP Students

Since 1976 the Nautical Archaeology Program (NAP) admitted more than 400 students and has offered at least one course on research and reconstruction of wooden hulls, taught by J. Richard Steffy (1976-1990), Fred Hocker (1991-1999), Cemal Pulak (2000) and myself (since 2001). Many students wrote thesis and dissertations on wooden shipbuilding technology, and their work is available online, in the NAP website (<https://nautarch.tamu.edu/academic/alum.htm>). Below is an almost complete list of all the NAP students.

This is a work in progress. Please email us if you find any mistake or omission.

1976

Tom Duran*
Terry Malham*
Sam Margolin*
Sheilla Mathews
Glenn Pennoyer*
Warren Riess

1977

Christian Buys*
Randall Davis
Don Keith
Elisabeth Shuey
Sheli Smith
Richard Swete †

1978

Robert Adams
Ken Cassavoy
Rick Green*
Paul Hundley
Shelley Lang
Delores Lipshitz*
Margaret Morden
Jay Rosloff
Joe John III 'Jody' Simmons
Dorothy Slane
Roger Smith
Stathos (?)*
John Trollinger*

1979

Christopher Amer
James Duff*
Steven Hoyt
Denise Lakey
Diana Lange*
Tom Oertling
Carol Olsen
Joe Schwartz*er*

1980

Tony Arons* †
James Baker
Bobbi Baker* †
Bill Bayreutrer*
Gianmarco Brenni
Carolyn Franklin
Stephan Robert James
Joy Joan Kitson-Mimmack †
Margaret E. 'Peggy' Leshikar-Denton
Manuela Francisca Lloyd
Mary Mintz*
Mikayla Perrault*
Cemal Pulak
Bruce Thompson
Robyn Woodward
James, Stephen

1981

Kevin Crisman
Alison Darroch
Mark Geannette

Michael Peter Goelet
David Douglas Haldane
Mark Myers
James Parrent
Cathryn Ann 'Kathy' Wadley-Hoyt

1982

Margaret Cowin
Shirley Gotelipe-Miller
Michael Halpern
Patricia McClenaghan
Mary Ann 'Marci' Renner
Cheryl Ward

1983

Michael Fitzgerald
Alydis van de Moortel
Steven Vinson
Becky (?)*

1984

James David Bigley*
Nancy Gayle Burford*
Sally Gauthier*
Cathy Hastedt*
Fred Hocker
James Jobling
William Lamb
Ralph Pedersen
Harding Polk*
Vicki Lee Reid*
Caprice Shaffer*

1985

Dan Charles Derby*
Elizabeth Garver
Richard Gerard Haiduven*
Nicolle Hirschfeld
Maria Jacobsen*
Marco Meniketti*
Charles Moore
Christopher Monroe
Larry Mott
David Muncher*
Miguel Paredes*
Lillian Ray (Martin) †

1986

Georgia Fox
Kenan Heidtke
Joe Herbert*
Jerry Lyon
Jack Neville*
Claire Peachey
Tom Redding*
Dianna Thornton

1987

Helen Dewolf
Jerome Hall
Holly Holland
Takahiko Inoue
Samuel Mark
Kathleen Ann McLaughlin
Bob Neyland
Paul Willoughby*

1988

Brinnen Carter
Sheila Alicia Clifford
Glenn Darrington
Franklin, Marianne
Lisa Lynn Garigen
Tommy Ike Hailey
Carmen Marquez
Jeff Tippey*
Samuel Turner

1989

William H. Charlton, Jr.
Gail Erwin
David Grant
Richard Herron
Tina Irwin*
Edward Rogers
Mark Smith
Wayne Smith
Valerie Stewart*

1990

Rahila Corrine Abbas-Shatto
John Bratten
James Coggeshall
Gregory D. Cook
Joe Cozzi

Noreen Doyle
Allen Flannigan
Mark Joseph Hartman †
Hawk Tolson
Alan Flanigan
David Robinson
Betsy Rosenthal*

1991

Roxani Margariti
Stephan Paris* †
Brett Phaneuf*
Richard Wills
Elizabeth Robinson Baldwin

1992

Mark Ahmed*
Kyra Bowling*
Clive Chapman*
Chas Coleman*
Elizabeth S. Greene
Curtis Hite*
Mason McDaniel*
Scott McLaughlin
Daria Merwin
Colin O'Bannon*
Taras P. Pevny*
Matthew Pridemore
Michael Scafuri
Cliff Smith*
Peter van Alfen
Barbara van Meir*

1993

Stephan Claeson
Peter Hitchcock
George Indruszewski
David Johnson
Brian Jordan
Anne Lesmann
Makela, Tommi T.
McDermott, Brendan J.
Dave Stewart
David A. Johnson

1994

Jaine Cox*

Greg Gidden*
Glenn Grieco
Greg Leibrand*
Leif Merryfield*
Christine A. Powell*
Jeff Royal
Steve Thorton*
Erika Washburn

1995

Christopher J. Cook
Doreen Marie Danis
[Eric Emery](#) □
Jonathan Faucher*
Janylin Gober*
Ben An Liu*
Tonka Ostoich*
Thanos Aronis Webb

1996

Debbie Carlson*
Stewart Collins*
Dan Davis
Peter D. Fix
Erich Heinold*
[Kristin Romey](#) ○
Beth Ruffner*
Christopher Sabick
Madeleine Donachie

1997

Kroum Batcharov
Oscar Blasingame*
Amy Borgens
Mark A. Feulner
Mathew Harpster
Travis Mason*
Troy Nowak
Athena Trakadas
Ken Trethewey*
Katherine Willis

1998

Erkut Arcak* †
[Ayse Devrim Atauz](#) □
Sarah Brigadier
Filipe Castro

Nancy G. DeBono
Adam Kane
Sara Keyes*
Shih-han (Sam) Lin
Mason Miller
Dan Walker

1999

Catherine Inbody
Lois La Garce Swanick
[Erika Laanela](#) ●
Asaf Oron
Mark E. Polzer
Sean Williams*
Michael*

2000

Christoph Bachhuber
Margaret Chotco
[Katie Custer](#) ●
Erik P. Flynn ○
[Gustavo A. Garcia](#) ●
[Sara Hoskins](#) ○
Rebecca S. Ingram
Lauren Lancaster*
Mike Quenoz*
Anthony Randolph †
Carrie Sowden
Grace Turner
Timothy Trussell
[Wendy van Duivenvoorde](#) □
Sue Vezeau

2001

Dante Bartoli
Paul Barton
Bart Beecroft*
Benjamin Chicowski*
Michael Clifford*
Starr Cox
[John Eastlund](#) ○
Eloise B. Eilert
[Alexander D. Hazlett](#) ■
Michael Jones
Toby Jones
Jeffrey Kampfl
Justin Leidwangler

Kellie M. Van Horn
Michael C. West

2002

Corey Arcak*
James Brad. Coombes*
Glenn Forrest*
[Tiago Fraga](#) ●
[Timothy Kane](#) ●
Tom Larson
Joshua Levin
[Randy Sasaki](#) ● ■
Jon Swanson

2003

[Alexis Catsambis](#) ○
[Pearce Creasman](#) ○■
Joshua A. Daniel
Allison Rebecca Farr*
Brian Charles Hill*
Eric Randy Morley*
[Blanca Rodriguez Mendoza](#) ●
[George Schwarz](#) ●□
[Alisa Michele Steere](#) ○

2004

Heather Gale Brown
Frank Robinson Burnside III*
Benjamin Louis Ford
James Alan Hethcox*
Kirsten Elise Jerch*
[Sarah Marie Kampbell](#) ●
[Matthew A. Labbe](#) ○
[Hiroaki Miyashita](#) ●
Andrew Philip Roberts

2005

Piort T. Bojakowski
[Nina Mayon Chick](#) ○
[Bryanna DuBard](#) ●
[Cortney Higgins](#) ●
Sam Koepnick
Kimberly Paige Rash
Scott Edward Sery*
Catherine Marie Sincich*
[Vincent Nicholas Valenti](#) ●
[Krissy Vogel](#) □

2006

Carrie Elizabeth Atkins
Carlos Cabrera Tejedor
[Lilia Campana](#) ●
[Claire Aliko Collins](#) ○
[Laura Gongaware](#) ●
Leeanne Elizabeth Gordon
Heather Elaine Hatch
[Megan Hathaway Lillie](#) ○
Bridget Christine Mcvae

2007

[Christopher M. Atkinson](#) ○
Donovan Leslie Griffin
Jessi Jean Halligan*
Bradley Alan Krueger
Ryan Curtis Lee*
[Johnny Littlefield](#) □ (*ongoing*)
William Alfred Moser*
Kiona Nicole Smith*
Shane Evan Winter*

2008

Marilyn Cassedy*
[Coral Eginton](#) ●
Heather Jones*
Veronica Morris
Renee Post*
[Kelby Rose](#) ■
Haley Streuding*
[Lindsey Thomas](#) ○
Christopher Tolley*
Amanda Vance

2009

Brennan Bajdek*
[Chris Cartellone](#) ■
Madeline Eustis*
Michael Gilbert
Kelly Greenwalt*
Douglas Inglis
[Meko Kofahl](#) ○□
Maureen Merrigan*
Justin Parkoff
Neil Puckett*
Jessica Stika
Andrew Thomson*

[Kotaro Yamafuno](#) ●■

2010

[John Albertson](#) ○
Landon Bell
Jose Luis Casaban
Megan Collier
Chad Gulseth*
Daniel Scott*
[Rodrigo Torres](#) ■
Staci Willis
Laura White
Katherine Worthington*

2011

[Nick Budsberg](#) ■ (*ongoing*)
[Sam Cuellar](#) ○■ (*ongoing*)
Arianna Dimucci
[Chris Dostal](#) □
Josh Harden
Stephanie Koenig
Tyler Laughlin
Megan Lickliter-Mundon
Karen Martindale
Kevin Melia-Teevan
Holly Perdue
Dave Ruff
Ralf Singh-Bischofberger

2012

Megan Anderson
Karl Krusell
Rachel Matheny
Grace Tsai

2013

Mara Dekinga
Nathan Gallager
Carolyn Kennedy
Carla Pereira*
[Patricia Schwindinger](#) ○□ (*ongoing*)
Rudy Vanzin

2014

There were no admissions

2015

Josh Farrar ■
Arik Bord ●■
Annaliese Dempsey □ (*ongoing*)
Kelsey Rooney ●
Miguel Gutierrez
Parker Brooks
Chelsey Cohen ●
Kersten Dollarhide ○
Raphael Franca ●
Phil Watson

2016

Ricardo Borrero ■ (*ongoing*)
Charles Bendig ■ (*ongoing*)
Marijo Gauthier Berube ■ (*ongoing*)
Robin Galloso □ (*ongoing*)
Richard Hendren □ (*ongoing*)
Carrigan Miller
Caroline Thirkill
Dorothy Rowland
Meredith Stoops ○
Sara Pianavilla
Rebecca Mattson □

2017

Eden Boric
Paul Cochran
Julia Herbst ○
Mason Parody
Lauren Shultz ○
Dan Bishop
Benjamin Loset □ (*ongoing*)
Ryan Theis

2018

Catherine Brooks
Chase Oswald ● (*ongoing*)
Claire Zak
Dhillon Tisdale
Michael Lewis ● (*ongoing*)
Raul Palomino ■ (*ongoing*)
Olivia Thomas ■ (*ongoing*)
Sheri Kapahnke
TJ Frizzell
Olivia Close
Jonathan Henneberry

2019

Bethany Beckett
Rebecca Bowles
Chably Bravo
Stephan DeCasien
Garreth Hastings
Austin Siess
Loyalty Traster-Lee

- - MA or MS committee chair
- - PhD committee chair
- - MA or MS committee member
- - PhD committee member
- * NAP degree not completed

Graduate Committees Chaired at Texas A&M University



Marijo Bérubé (2016-PhD in progress),
French Shipbuilding of the 17th and 18th Centuries.



Arik Bord (2019-PhD in progress),
Trade, Empire, and Life on the Isle: Finding Antigua's Trade Towns.



Ricardo Borrero (2016-PhD in progress),
Iberian Shipbuilding in the 17th Century.



Samuel Cuellar (2011-PhD in progress),
Indianola, Texas: A Cultural Maritime Landscape and Archaeological Study of Texas' 'Queen City Of The West'.



Raul Palomino (2018-PhD in progress),
The Nautical Archaeology of S. Lorenzo Island, Callao, Peru.



Olivia Thomas (2018-PhD in progress),
A Maritime Landscape of St. Croix, U.S. Virgin Islands.



Michael Lewis (2018-MS in progress),
Digital 3D Reconstruction of a British 74-Gun Ship-of-the-Line, HMS Colossus, from its original construction plans



Chase Oswald (2018-MS in progress),
Shipwrecks and Literature.



Nicholas Budsberg (2011-PhD in progress),
From Thought to Practice: Theory and Methodology in Maritime and Nautical Archaeology.



Bendig, Charles (2016-PhD in progress),
An Oceanic Tradition: Understanding European Expansionism. Through a Hybrid Shipbuilding Methodology.



Farrar, Joshua (2018-PhD in progress),
The Milam Street Bridge Artifact Assemblage: Unravelling a Mystery.



Randall Sasaki (PhD 2009-2019).
The History, Present and Future of Underwater Cultural Heritage Management in Japan. PhD Dissertation, Anthropology. College Station: Texas A&M University.



Joshua Farrar (MA 2015-2018)
Non thesis option.



Raphael Franca (MS 2016-2017)
A Geospatial Analysis of Pre-Columbian Florida Log Boats



Kelsey Romney (MS 2016-2017)
The Power of Location Predictive Modeling and GIS.



Chelsea Cohen (MS 2016-2017)

Raising Port Royal: A Geospatial Reconstruction of the 1692 City Through Integrated GIS and 3D Modeling



Board, Arik (MA 2015-2019)

Chain of Supply: A Geospatial Analysis of Inland Trade Routes on the Island of Antigua during the Atlantic Maritime Sugar Trade.



Samila Ferreira Pereira (PhD 2012-2016)

Policies of Memory, Politics of Forgetting. São Lourenço do Sul, Brazil.



Kotaro Yamafune (PhD, 2012-2015)

Using Computer Vision Photogrammetry (Agisoft PhotoScan) to Record and Analyze Underwater Shipwreck Sites.



Rodrigo Torres (PhD, 2010-2015)

The Archaeology of Shore Stranded Shipwrecks of Southern Brazil.



Chris Cartellone (PhD, 2009-2015)

H.M.S. Solebay and Maritime Archaeological Heritage Preservation in Nevis, West Indies.



Kotaro Yamafune (MA, 2009-2012)

The Portuguese Century in Japan and the Namban Screens.



Kelby Rose (PhD, 2008-2014)

Reverse Naval Architecture of Vasa, a 17th-Century Swedish Warship.



Coral Eginton (MA 2008-2014)

Dutch ship pharmacies.



Laura Gongaware (MA 2006-2013)

Treasure Hunting: Three Case Studies.



Paul Creasman (PhD 2006-2010)

Extracting Cultural Information from Ship Timbers.



Lilia Campana (MA 2006-2010)

Vettor Fausto (1490-1546), Professor of Greek and Naval Architect: a New Light on the 16th-Century Manuscript Misure Di Vascelli Etc. di...Proto Dell'Arsenale di Venetia.



Bryanna Dubard (MA 2005-2013)

The Key to All the Indies: Defense of the Isthmus of Panama .



Courtney Higgins (MA 2005-2012)

The Venetian Galley of Flanders: from Medieval 2-Dimensional Treatises to 21st Century 3-Dimensional Model.



Vincent Valenti (MA 2005-2009)

Transitions in Medieval Mediterranean Shipbuilding: A Reconstruction of the Nave Quadra of the Michael of Rhodes Manuscript.



Sarah Kampbell (MA 2004-2007)

The Pantano Longarini Shipwreck: A Reanalysis.



Hiroaki Miyashita (MA 2004-2006)

Ancient Ships of Japan.



George Schwarz (MA 2003-2008)

The History and Development of Caravels.



Blanca Rodriguez (MA 2003-2008)

Standardization of Spanish Shipbuilding: Ordenanzas para la Fabrica de Navios de Guerra y Mercante - 1607, 1613, 1618.



Randall Sasaki (MA 2002-2008)

The Origin of the Lost Fleet of the Mongol Empire.



Tiago Fraga (MA 2002-2007)

Santo António de Tanna: Story and Reconstruction.



Timothy Kane (MA 2002-2006)

Influence and Evolution: The Development of the Batten Lug Sail.



Eastlund, John (MA 2002-2010)

No thesis option.



Alex Hazlett (PhD 2001-2007)

The Nao of the Livro Nautico: Reconstructing a Sixteenth Century Indiaman from Texts.



Gustavo Garcia (MA 2000-2005)

The Rincón Astrolabe Shipwreck.



Katie Custer (MA 2000-2004)

Wrought Iron Hand Tools from the Underwater Archaeological Excavations of Colonial Port Royal, Jamaica, C. 1692.



Erika Laanela (MA 1999-2008)

Instrucción Náutica (1587) by Diego García de Palacio: an Early Nautical Handbook from Mexico.

Graduate committee memberships at Texas A&M University - Anthropology

Dollarhide, Kirsten, 2019. *A Tale of Two Shipping Crates from Brother Jonathan 1865*. MS Thesis, Anthropology. College Station: Texas A&M University.

Herbst, Julia, 2019. *The Construction of the Cityplace Schooner*. MS Thesis, Anthropology. College Station: Texas A&M University.

Schultz, Lauren, 2019. *Placing The Past: Using GIS to Reconstruct the Maritime Landscape of the 18th Century Alexandria, Virginia Waterfront*. MS Thesis, Anthropology. College Station: Texas A&M University.

Schwindinger, Patricia, 2018. *A Quantitative Analysis of the Speed of Dutch and British Shipping, 1730-1850*. MA Thesis, Anthropology. College Station: Texas A&M University.

Stoops, Meredith, 2018. *Identifying Historic Ceramics: Applications of X-Ray Fluorescence Spectrometry in Archaeology*. MS Thesis, Anthropology. College Station: Texas A&M University.

Vogel, Kristen, 2017, *'It Wasn't the Money Boat': The Myth and Reality of Treasure Hunting for Western River Steamboats in the United States*. PhD Dissertation, Anthropology. College Station: Texas A&M University.

Dostal, Christopher, 2017, *Laser Scanning as a Methodology for the 3-D Digitization of Archaeological Ship Timbers: A Case Study Using the World Trade Center Shipwreck*. PhD Dissertation, Anthropology. College Station: Texas A&M University.

Cuellar, Samuel, 2015, *In a Different Light: An Examination of Artifacts Using Affordable Digital Infrared Imaging*. MA Thesis, Anthropology. College Station: Texas A&M University.

Chick, Nina, 2015, *The Cargo of the Steamboat Heroine and the Army of the Frontier, 1838*. MA Thesis, Anthropology. College Station: Texas A&M University.

Albertson, John, 2014, *The Juniper Coast: A Survey of the Medieval Shipwrecks of Novy Svet, Ukraine*. MA Thesis, Anthropology. College Station: Texas A&M University.

Kofahl, Meko, 2013, *Dark Age Plague Ships: Sixth-Century C.E. Trade Routes and their Role in Transmitting the Justinianic Plague*. MA Thesis, Anthropology. College Station: Texas A&M University.

Catsambis, Alexis, 2012, *Preserving the submerged and coastal maritime heritage of the United States*. PhD Dissertation, Anthropology. College Station: Texas A&M University.

Schwarz, George, 2012, *The Shipwreck of the Steamer Phoenix*. PhD Dissertation, Anthropology. College Station: Texas A&M University.

Collins, Claire 2012, *Amphora Graffiti from the Byzantine Shipwreck at Novy Svet, Crimea*. MA Thesis, Anthropology. College Station: Texas A&M University.

- Thomas, Lindsey, 2011, *The Shipwreck of the A.J. Goddard*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Atkinson, Christopher, 2011, *Impacts of Bottom Trawling on Underwater Cultural Heritage*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Smith, Megan, 2010, *A Necessary Duty, A Hideous Fault: Digital Technology and the Ethics of Archaeological Conservation*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Labbe, Matthew A., 2010, *A Preliminary Reconstruction of the Yassiada Sixteenth Century Ottoman Wreck*. MA Thesis, Anthropology. College Station: Texas A&M University.
- van Duivenvoorde, Wendy, 2008, *The Batavia Shipwreck: An Archaeological Study of an Early Seventeenth-Century Dutch East-Indiaman*. PhD Dissertation, Anthropology. College Station: Texas A&M University.
- Marshall, Dawn, 2007, *Ethnopolynological Applications in Land and Water Based Archaeology*. PhD Dissertation, Anthropology. College Station: Texas A&M University.
- Creasman, Pearce Paul, 2006, *The Cairo Dahshur Boats*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Flynn, Peter Eric, 2006, *H.M.S. Pallas: Historical Reconstruction of an 18th-Century Royal Navy Frigate*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Yoder, Cassidy, 2006, *The Late Medieval Agrarian Crisis and Black Death Plague Epidemic in Medieval Denmark: a Paleopathological and Paleodietary Perspective*. PhD Dissertation, Anthropology. College Station: Texas A&M University.
- Steere, Alisa Michele, 2005, *The Evolution of Decorative Work on English Men-of-War From the 16th to the 19th Centuries*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Atauz, Ayse, 2004, *Trade, piracy, and naval warfare in the central Mediterranean: the maritime history and archaeology of Malta*. PhD Dissertation, Anthropology. College Station: Texas A&M University.
- Romey, Kristin, 2004, *The Vogelbarke of Medinet Habu*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Hoskins, Sara, 2003, *16th Century Cast-Bronze Ordnance at the Museu de Angra do Heroismo*. MA Thesis, Anthropology. College Station: Texas A&M University.
- Emery, Eric, 2003, *The Last of Mr. Brown's Mosquito Fleet: A History and Archaeology of the American Row Galley Allen on Lake Champlain, 1814 – 1825*. PhD Dissertation, Anthropology. College Station: Texas A&M University.

Graduate Committee Memberships at Texas A&M University Computer Science and Visualization



Matthew Suarez (MS 2015-2016, Visualization Department)

Committee Chair: Frederic Parke

Developing a procedural modeling utility for use in nautical archaeological ship reconstruction research



Sanghita Bandyopadhyay (MA 2015-2016)

Committee Chair: Richard Furuta

Learning Based-Approach for Personalized Expert Detection



Yue Yan (MS 2015-2016, Computer Science Department)

Committee Chair: Richard Furuta

Data mining, analysis and information retrieval



Charles Justus Cook (MS 2010-2011, Visualization Department)

Committee Chair: Frederic Parke

A Parametric Model of the Portuguese Nau



Carlos Monroy (PhD 2006-2010, Computer Science Department)

Committee Chair: Richard Furuta

A Digital Library Approach in the Reconstruction of Ancient Sunken Ships.



Audrey Wells (MA 2006-2008, Visualization Department)

Committee Chair: Frederic Parke

Virtual Reconstruction of a Seventeenth-Century Portuguese Nau.

Graduate Committee Memberships at other Universities

Magalhães, Ivone, (Post-Graduation 2019, Universidade Autónoma de Lisboa, Portugal), *Contributos para o estudo da caravela do Varadouro do Rio Cávado, Esposende (Norte de Portugal)*.

Ribeiro, Nuno, (Post-Graduation 2019, Universidade Autónoma de Lisboa, Portugal), *O Naufrágio do Childwall Hall, 1878*.

Aldana, Jesus, (PreGrado 2019, Universidad del Externado, Colombia), *Propuesta metodológica para la construcción de una matriz de indicadores arqueológicos e históricos para la identificación de naufragios: El caso de un navío colonial ubicado en el Canal de Bocachica (Cartagena de Indias)*.

Khedr, Mohamed, (MA 2019, Alexandria University, Egypt), *Treasure Hunting of Underwater Cultural heritage: Analytical Study*.

Kalandar, Shadi, (MA 2018, University of Tehran), *Identification, Classification and Typology of the Watercraft Illustrated on the Proto-Elamite and Elamite (3200 BC- 7th Century BC) Seals and Seal Impressions with a Focus on their Functions*.

Roche, Arnaud Cazenave de la, (Doctorat 2018, Université Paris-Sorbonne), *La construction navale au XVIème siècle en Méditerranée : l'apport de l'épave de la Mortella III (Saint-Florent, Haute-Corse)*.

Claggett, Daniel (MA 2017, Flinders University), *A Typological Assessment of Anchors used in Northern Europe During the Early and High Middle Ages, CE750 – 1300*.

Hardjoko, Hutomo Putra, (MA 2017, Flinders University), *Indonesian Maritime Cultural Resources Management: A Study of Salvaged Material Cultures from Historic Shipwreck Finds in Indonesia*.

Mirkin, Daniel (PhD 2015, Tel Aviv University), *Aspects of Inter-relations between Land and Sea during the Crusader Period: Crusader Seamanship in the Southern Levant*.

Jordan, Celeste, (MA 2015, Flinders University), *Here, There, and Everywear: Development of Provenance Technique for Mother of Pearl Buttons*.

Eliav, Joseph (PhD 2012, Department of Science, Technology and Society, Bar-Ilan University, Israel), *Quinquereme. The Biography of a Technological Enterprise*.

Jalil, Ahmad Safwan (MA 2012, Flinders University), *Malay Swivel Guns*.

Pietruszka, Andrew (PhD 2011, Dep. of Anthropology, Syracuse University, NY), *Artifacts of Exchange: A Multiscalar Archaeology of two European Shipwrecks at Elmina, Ghana*.

Borrero, Ricardo (MA 2011, Universidad de los Andes, Colombia), *Procesos de Formación de Sitios Arqueológicos Sumergidos en la Bahía de Cartagena de Indias*.

Kimura, Jun (PhD 2011, Flinders University, Australia), *Principles in East Asian Shipbuilding Tradition*.

Rosa, Leandro (MA 2008, Universidade do Algarve, Portugal), *Arqueologia Subaquática em Portugal*.



ShipLAB (Photo: Rodrigo Torres, 2014)

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The **Center for Maritime Archaeology and Conservation** at Teaxs A&M University.



The **Institute of Nautical Archaeology** at Texas A&M University.



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Mr. Charles Consolvo has also supported our projects through the Institute of Nautical Archaeology, making the Playa Damas

and Puerto Rico possible, among many other projects.

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The **Spain-USA Foundation** and **Dr. James Goold**, for their support of the Playa Damas project.

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The **ProMARE Foundation**, **Brett and Ayse Phaneuf** for their support of the Stella 1 project.



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Instituto de História Contemporânea, Universidade Nova de Lisboa.

Instituto de Arqueologia e Paleociências, Universidade



Nova de Lisboa.

Faculdade de Letras, Universidade de Lisboa. And Dr. Fran-



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The **Laboratoire des Sciences de l'Information et des Systèmes**, CNRS, France., and Dr. Pierre Drap.



Consejo Superior de Investigaciones Científicas, Spain, and **Dr. Ana Crespo**.



Ayuntamiento de Ribadeo, Spain, for their support of the *Santiago de Galicia* project.

The **Real Club Náutico de Ribadeo**, for their support of the *Santiago de Galicia* project.

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The **University of Zadar**, for their support of the *Gnalić* project.

The **Croatian Ministry of Culture**, for their support of the *Gnalić* project.

The **Municipality of Biograd**, Croatia, for their support of the *Gnalić* project.

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The **Municipality of Lagos** and **Dr. Rui Loureiro**, Portugal, for their support of the *Lagos* project.

The **Portimão Marina**, for their support of the *Arade 1* project.

Mr. George Robb, the Institute of Nautical Archaeology.

J.-B. Pelletier, Senior Nautical Archaeologist and Remote Sensing Specialist at **URS Corporation**, who has been teaching our students remote sensing for years.



Pat Sanders, founder and president of **Hypack Inc.**, **Lourdes Evans**, and **Christian Shaw**, for sponsoring our remote sensing courses.



The **Maritime Archaeology Trust**, and **Garry Momber**.

Universidade do Porto, Faculdade de Engenharia, and **Dr. João Tasso de Sousa** and his team.



The **Société d'Etudes en Archéologie Subaquatique (SEAS)** and **Dr. Arnaud Cazenave de la Roche**.

Um mergulho na História (OPP No. 466, and **Alexandre Monteiro**.

University of Wales and **Dr. Nigel Nayling**.



Câmara Municipal de Esposende, and archaeologists **Ana Almeida** and **Ivone Magalhães**.

Câmara Municipal de Vila do Conde and archaeologist **Pedro Brochado de Almeida**.

Câmara Municipal de Alcácer do Sal and archaeologists **Mari-sol Ferreira** and **Rita Balona**.

Universidad Externado de Colombia, and archaeologists **Carla Riera**, **Carlos del Cairo**, and **Jesus Aldana**.

Università degli Studi di Udine, and archaeologist **Massimo Capulli**.

Research Associates

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University of Buenos Aires (UBA), Institute of Archaeology, School of Philosophy & Letters

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Università degli Studi di Udine (Uniu)

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Japan

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Kotaro Yamafune

Portugal

Universidade do Porto – Faculdade de Engenharia – LSTS

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Instituto de História Contemporânea (IHC) / Instituto de Arqueologia e Paleociências (IAP)

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Centro de Arqueologia Náutica de Alcácer do Sal (CANAL)

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Flávio Biscaia

Câmara Municipal de Alcácer do Sal (CMAS)

Rita Balona

Câmara Municipal de Esposende (CME)

Ivone Magalhães

Ana Almeida

Alexandre Sá

João Sá

Câmara Municipal de Vila do Conde (CMVC)

Pedro Almeida

António José Carmo (Samuel)

Spain

Consejo Superior de Investigaciones Científicas

Ana Crespo Solana

Maria Luisa Bas Pardo

Arqueonauta S.L.

Miguel San Cláudio

Universitat de Valencia

Carlos de Juan

Museo Naval – Barco de la Virgen

Carmen Concepción

Vicente Benitez Cabrera

Daniel Rodriguez Zaragoza

Uruguay

Universidad de la República (UDEAR)

Rodrigo Torres

Samila Ferreira

Wales

Nautical Archaeology Programme, University of Wales (UWTSD)

Nigel Nayling

